09-01-00

A

08/31/00 JC926 U.S. PTO

UTILITY PATENT APPLICATION TRANSMITTAL UNDER 37 CFR 1.53(b)	ATTORNEY DOCKET 80760THC Customer No. 01333
To: Commissioner for Patents Box Patent Application Washington, D.C. 20231	**Express Mail Label No.** **EL485199387US**
QUALITY ASSURANCE SYSTEM FOR RETAIL PHOTOFINISHING First Named Inventor (or Application Identifier): Timothy M. Wozniak, et al	**Date:** August 31, 2000

JC564 U.S. PTO 09/652190 08/31/00

Enclosed are:

1. [X] Specification
2. [14] Sheet(s) of drawing(s)
3. [ ] Information Disclosure Statement Under 37 CFR 1.97.
4. Combined Declaration for Patent Application and Power of Attorney:
   - 4a. [ ] New
   - 4b. [ ] Copy from a prior application (37 CFR 1.63(d) (for continuation/divisional with Box 11 completed)
5. [ ] Incorporation by Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. [ ] Assignment of the invention to **Eastman Kodak Company**
7. [ ] Certified copy of a priority
8. [X] Permit to File Abroad
9. [ ] Deletion of Inventor(s). Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
10. [ ] If a 111A application prior to examination of the above-identified application, amend the specification at Page 1, after the title, by inserting the following:
    --CROSS REFERENCE TO RELATED APPLICATION
    Reference is made to and priority claimed from U.S. Provisional Application Serial No. , filed , entitled .

If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

11. [ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No: ,
12. [X] Please address all written communications to Thomas H. Close, Patent Legal Staff, Eastman Kodak Company, 343 State Street, Rochester, NY 14650-2201. Please Direct all telephone calls to Thomas H. Close at (716) 722-2396.

The filing fee has been calculated as shown below:

FOR:	NO. FILED		NO. EXTRA	RATE	FEE
BASIC FEE					$ 690
TOTAL CLAIMS	13	- 20 =	0	x 18 =	$ 0
INDEPENDENT CLAIMS	1	- 3 =	0	x 78 =	$ 0
[ ] MULTIPLE DEPENDENT CLAIM PRESENTED				+ 260	$0
				TOTAL	$ 690

[X] Please charge my Eastman Kodak Company Deposit Account No. **05-0225** in the amount of $ 690.

A duplicate copy of this sheet is enclosed

[X] The Commissioner is hereby authorized to charge any additional filing fees required under 37 CFR 1.16 or credit any overpayment to Eastman Kodak Company Deposit Account No. **05-0225.**

A duplicate copy of this sheet is enclosed.

Thomas H. Close/cjm
Telephone: (716) 722-2396
Facsimile: (716) 477-4646

Attorney for Applicants
Registration No. 27,428

PATENT APPLICATION BASED ON:

Docket No: 80,760

Inventors: Timothy Wozniak
Ron Craven
Grant Ahlrichs
Phil Davies

Attorney: Thomas H. Close

QUALITY ASSURANCE SYSTEM FOR RETAIL PHOTOFINISHING

Commissioner for Patents
Attn: Box Patent Application
Washington, DC 20231

Express Mail Label No: EL 485199387US
Date: August 31, 2000

QUALITY ASSURANCE SYSTEM FOR RETAIL PHOTOFINISHING

FIELD OF THE INVENTION

The present invention is related to photofinishing and more particularly to a system and method for assuring the quality of products and services provided by photofinishers.

BACKGROUND OF THE INVENTION

A retail photofinishing site is a business that has the capability using on-site equipment, such as photofinishing mini-labs, to locally produce photofinishing services directly for a customer. There are currently over one hundred thousand retail photofinishing sites worldwide, and the number is increasing rapidly. A wholesale photofinishing laboratory receives photofinishing orders from a plurality of distributed outlets, such as camera stores, department stores, grocery stores, and drug stores that do not have on-site photofinishing capability, and fulfills the photofinishing orders for the retail outlets. There are currently a few hundred wholesale photofinishers world wide.

Presently, manufacturers of photographic equipment and supplies such as the Eastman Kodak Company license their brand name to wholesale photofinishers. It would be desirable for such manufacturers to leverage their brand identity by licensing the use of their brand name to their retail photofinishing customers. To protect the brand, the level of quality of branded products and services from the retail photofinishers must be controlled. Existing systems employed by photographic manufacturers for assuring quality of the wholesale photofinishers, primarily include manually implemented processes and measures requiring a high degree of personal involvement and contact by representatives of the photographic manufacturer. It is primarily because of the high level of personal interaction required to assure quality, that manufacturer branded output is currently limited to a relatively few large volume wholesale photofinishing laboratories.

Efforts to provide quality control for retail photofinishing sites have concentrated on the chemical processing aspect of the photofinishing

operation. For example one approach to providing quality assurance in a retail photofinisher is the Kodatel™ system wherein manufacturer supplied control materials are processed in the retail site's equipment and measured by a densitometer to produce process control data relating to the chemical processes used at the retail photofinishing site. In this system, there is not necessarily a connection between the manufacturer and the retail site. Since these quality assurance approaches for retail photofinishing sites do not address all aspects of quality experienced by the consumer, it has not been the practice of the industry to license the photographic manufacturers brand to retail photofinishers. There is a need therefore for an improved quality assurance system for retail photofinishing that can enable the broader licensing of the photographic manufacturers' brand name.

SUMMARY OF THE INVENTION

The need is met according to the present invention by providing a quality assurance system for retail photofinishing including a communication network; a retail photofinishing site including photofinishing equipment, a client computer connected to the communication network, and a process monitoring device connected to the computer; and a service center computer located at a service center and connected to the communication network. Client software running on the client computer includes: a quality management application for providing quality information to a manager of the photofinishing site; an operator testing and training application for training and certifying an operator of the retail site and providing testing, training and certification related data to the service center and the quality management application; a quality evaluation application for monitoring the quality of the product and services provided by the photofinishing site and providing quality related data to the service center and the quality management application; a customer feedback application for providing customer feedback information to the quality management application and to the service center; and a process control application for monitoring the condition of the photofinishing equipment at the site and providing process control data to the service center and to the quality management application. Software running on the service center computer, includes an application for collecting storing and

analyzing data from a plurality of photofinishing sites and producing a report on the quality of products and services provided by the sites.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram showing a photofinishing system including a retail photofinishing site and a service center operated by a photographic manufacturer;

Fig. 2 is a block diagram showing the software applications running in the client computer of Fig. 1;

Fig. 3 is a block diagram of the software application running in the service center computer of Fig. 1;

Fig. 4 is a block diagram showing the details of the quality management application running on the client computer of Fig. 2;

Fig. 5 is a block diagram showing the details of the operator training and testing application running on the client computer of Fig. 2;

Fig. 6 is a block diagram showing the details of the color vision portion of the operator training and testing application of Fig. 5;

Fig. 7 is a block diagram showing the details of the operator training and testing portion of the operator training and testing application of Fig. 5;

Fig. 8 is a block diagram showing the details of the quality evaluation application running on the client computer of Fig. 5;

Fig. 9 is a block diagram showing the details of the customer feedback application running on the client computer of Fig. 5;

Fig. 10 is a block diagram showing the details of the process control application running on the client computer of Fig. 5;

Fig. 11 is a block diagram showing the details of the quality evaluation database running on the service center computer of Fig. 3;

Fig. 12 is a block diagram showing the details of the operator training and testing database running on the service center computer of Fig. 3;

Fig. 13 is a block diagram showing the details of the customer feedback database running on the service center computer of Fig. 3; and

Fig. 14 is a block diagram showing the details of the process control results database running on the service center computer of Fig. 3.

DETAILED DESCRIPTION OF THE INVENTION

Referring to Fig. 1 a photofinishing system **10** includes a plurality of retail photofinishing sites **12** and a service center **14** connected to a communication network **16** such as phone line, or a virtual private network to reduce telephone costs. The retail photofinishing site **12**, includes photofinishing equipment **18** such as a film processor, printer/paper processor. The photofinishing equipment may also include a film or print scanner for capturing digital images from film or prints, a digital printer for printing the digital images produced by the scanner or from digital images captured by a digital camera.

The retail photofinishing site includes a process monitoring device **20**, such as a densitometer, for making physical measurements on the output of the photofinishing equipment **18**. The measurements are supplied to a computer **22** that runs software applications as described below to assure the quality of the products and services provided by the retail photofinishing site. The computer **22** is connected to a modem **24** for communicating on the communication network **16**.

The service center **14** includes a service center computer **26** and a modem **28** connected to the service center computer **26** for communicating with retail photofinishing sites **12.** The service center computer **26** runs software applications as described below, including remote service applications that cooperate with the software applications at the retail photofinishing sites **12** to facilitate the interaction of the remote support technician **27** with the retail photofinishing sites **12** either by phone or in person, to assure the quality of the products and services provided by the photofinishing sites **12.**

Referring to Fig. 2, the software applications running on the computer **22** at the retail site will now be described. The client computer **22** includes the following applications which are described below: quality management and reporting **30**; operator training and testing **40;** quality evaluation **60**; customer feedback collection **70**; and process control **80.**

Referring to Fig. 3, the software applications running on the service center computer **26** will now be described. The service center computer **26** includes the following applications which are described below: quality evaluation database **100**; operator training and testing database **110**; customer feedback database **120**; and process control database **130**.

Referring to Fig. 4, the Quality management and reporting application **30** of the client computer **22** will now be described. The quality management and reporting application **30** consists of the employee database **31**, the process control database **33**, the customer feedback and contact management database **35**, and the quality results database **38**. The employee database **31** is fed with employee identification information by the retail site manager, and operator training and testing information by the operator training and testing application **40**. The employee database **31** in turn provides training summary reports **32** to the retail site manager and to the operator training and testing database **110** on the service center computer **26** via the client modem **24**, the communications network **16**, and the service center modem **28**. The process control database **33** is fed with process control information by the process control application **80**. The process control database **33** in turn provides process control summary reports **34** to the retail site manager and process control data to the process control results database **130** on the service center computer **26** via the client modem **24**, the communications network **16**, and the service center modem **28**. The customer feedback and contact management database **35** is fed with customer feedback and contact information by the customer feedback application **70**. The customer feedback and contact management database **35** in turn provides customer feedback summary reports **36** and customer contact log reports **37** to the retail site manager and customer feedback data to the customer feedback database **120** on the service center computer **26** via the client modem **24**, the communications network **16**, and the service center modem **28**. The quality results database **38** is fed with quality evaluation information by the quality evaluation application **60**. The quality results database **38** in turn provides quality results summary reports **39** to the retail site manager and quality results information to the quality evaluation database **100**

on the service center computer **26** via the client modem **24**, the communications network **16**, and the service center modem **28**.

Referring to Fig. 5, the operator training and testing application **40** will now be described. The operator training and testing application **40** consists of the color vision test module **42** and the operator training and testing module **50**.

Referring to Fig. 6, the color vision test module **42** of the operator training and testing application **40** will now be described. The color vision test module **42** begins with the entrance of an employee identification by the employee. The color vision test module **42** checks the employee database **31** for the validity of the entered employee identification **43**. If the entered employee identification does not match an employee identification in the employee database **31**, the color vision test module **42** terminates. If the entered employee identification matches an employee identification in the employee database **31**, the color vision test module **42** proceeds with the color vision test **44**. The color vision test **44** consists of a short introduction to possible color vision deficiencies followed by a demonstration to familiarize the employee with the test. The actual test consists of a pre-screening of six different plates followed by a more specific screen of fourteen additional plates if there are incorrect answers in the pre-screen. These plates are modeled after "Ishihara's Tests For Color Blindness" and are designed to show blue-yellow or red-green color vision deficiencies. If the employee does not pass the color vision test **44**, the module informs the employee of the color vision deficiency **45** and terminates. If the employee passes the color vision test **44**, the color vision test module **42** informs the employee **46**, writes the time and date for the pass of the color vision test **44** to the employee identification in the employee database **31** and terminates.

Referring to Fig. 7, the operator training and testing module **50** will now be described. The operator training and testing module **50** consists of the following topics: Understanding Color, Print Grading, Chemical Management, Minilab Maintenance, Customer Delight, Assertiveness, and Retail Selling. The operator training and testing module **50** begins with the entrance of an employee identification by the employee. The operator training and testing module **50** checks the employee database **31** for the validity of the entered employee

identification. If the entered employee identification does not match an employee identification in the employee database **31**, the operator training and testing module **50** terminates. If the entered employee identification matches an employee identification in the employee database **31**, the operator training and testing module **50** offers a choice to the employee to take a pre-test or not. If the employee chooses not to take the pre-test, the operator training and testing module **50** proceeds to offer the employee a list of all training modules **56** and the employee proceeds through each training module **58**. If the employee chooses to take the pre-test, the operator training and testing module **50** administers the pre-test **52**. At the conclusion of the pre-test **52**, if the score is 100% correct, the operator training and testing module **50** checks the employee database **31** for a passed color vision test **44**. If there is a record of a passed color vision test **44**, the operator training and testing module **50** informs the employee and writes the time and date for the pass of the operator training **50** to the employee database **31** and terminates. If there is no record in the employee database **31** of a passed color vision test **44**, the operator training and testing module **50** informs the employee that the color vision test **44** must be passed prior to receiving credit for operator training and terminates. If the pre-test **52** score is less than 100%, the operator training and testing module **50** displays for the employee a list of training modules **54** highlighted with training modules relevant to the missed questions on the pre-test **52** and the employee proceeds through each highlighted training module **58**. At the completion of the training modules **58**, the employee is offered a final test **59**. Prior to the final test **59** being administered, the operator training and testing module **50** checks the employee database **31** for a passed color vision test **44**. If there is no record in the employee database **31** of a passed color vision test **44**, the operator training and testing module **50** informs the employee that the color vision test **44** must be passed prior to taking the final test **59** and terminates. If there is a record of a passed color vision test **44**, the operator training and testing module **50** proceeds to administer the final test **59**. At the conclusion of the final test **59**, if the score is 100%, the operator training and testing module **50** informs the employee and writes the time and date for the pass of the operator training **50** to the employee database **31** and terminates. If the score for the final test **59** is less

than 100% the operator training and testing module **50** displays for the employee a list of training modules **54** highlighted with training modules relevant to the missed questions on the final test **59** and the employee proceeds through the relevant training modules **58**. The employee proceeds in this fashion until the final test **59** is passed. A bookmarking feature in the operator training and testing module **50** allows an employee to exit at any time and upon reentry at a later time, go to directly to the previous exit point.

Referring to Fig. 8, the quality evaluation application **60** will now be described. The quality evaluation application **60** begins with the entrance of an employee identification **61** by the employee. The quality evaluation application **60** checks the employee database **31** for the validity of the entered employee identification. If the entered employee identification does not match an employee identification in the employee database **31**, the quality evaluation application **60** terminates. If the entered employee identification matches an employee identification in the employee database **31**, the quality evaluation application **60** allows the entry of order identification information (twin check number, film type, speed, film brand) **63** by the employee. The quality evaluation application **60** writes this information to the quality results database **38**. The quality evaluation application **60** then asks for input by the employee on photographic quality **64**. If the employee judges that photographic quality is not acceptable, the quality evaluation application **60** collects input from the employee on the type of photographic imperfection **65** and writes this information to the quality results database **38**, and proceeds to ask for input from the employee on physical quality **66**. If the employee judges that photographic quality is acceptable, the quality evaluation application **60** proceeds to ask for input from the employee on physical quality **66**. If the employee judges that physical quality is not acceptable, the quality evaluation application **60** collects input from the employee on the type of physical imperfection **67** and writes this information to the quality results database **38**, and proceeds to ask for input from the employee on clerical quality **68**. If the employee judges that physical quality is acceptable, the quality evaluation application **60** proceeds to ask for input from the employee on clerical quality **68**. If the employee judges that clerical quality is not acceptable, the quality

evaluation application **60** collects input from the employee on the type of clerical imperfection **69** and writes this information to the quality results database **38**, and terminates. If the employee judges that clerical quality is acceptable, the quality evaluation application **60** terminates.

Referring to Fig. 9, the customer feedback application **70** will now be described. The customer feedback application **70** begins with the entrance of an employee identification **71** by the employee. The customer feedback application **70** checks the employee database **31** for the validity of the entered employee identification. If the entered employee identification **71** does not match an employee identification in the employee database **31**, the customer feedback application **70** terminates. If the entered employee identification matches an employee identification in the employee database **31**, the customer feedback application **70** allows the entry of order identification information (twin check number, film type, speed, film brand) **73** by the employee. The customer feedback application **70** writes this information to the customer feedback database **35**. The customer feedback application **70** then asks for input by the employee on the category (photographic, physical, clerical) of the customer complaint **74**. The customer feedback application **70** writes this information to the customer feedback database **35**. The customer feedback application **70** then asks for input by the employee on the resolution (make over all, part, or none of the order) of the customer complaint **75**. The customer feedback application **70** writes this information to the customer feedback database **35**. The customer feedback application **70** then asks for input by the employee on the level of manager follow-up (required or not required) of the customer complaint **76**. If manager follow-up is required, the customer feedback application **70** asks for customer contact information **77** to be input by the employee and writes this information to the customer contact database **37** and terminates. If manager follow-up is not required, the customer feedback application **70** terminates.

Referring to Fig. 10, the process control application **80** will now be described. The employee begins with a processed film control strip **81** or a processed paper control strip **82**. These control strips are measured by the process monitoring device **20** which feeds data into the process control database **83** via the

client computer **22**. The process control application **80** writes this information to the process control database **33**. The process control application **80** compares the entered data with internally stored control limits **84**. If the data is within limits, the process control application returns a go indicator **85** to the operator and writes this information to the process control database **33** of the quality management and reporting application **30** and terminates. If the data is not within limits, the process control application returns a no-go indicator **86** to the operator and writes this information to the process control database **33** of the quality management and reporting application **30** and terminates.

Referring to Fig. 11, the quality evaluation database **100** of the service center computer **26** will now be described. The quality evaluation database **100** receives quality results data from a plurality of quality results databases **38** of the quality management and reporting application **30** running on the client computer **22**. The quality evaluation database **100** produces summary reports **101** and individual retail site reports **103**.

Referring to Fig. 12, the operator training and testing database **110** of the service center computer **26** will now be described. The operator training and testing database **110** receives operator training and testing data from a plurality of employee databases **31** of the quality management and reporting application **30** running on the client computer **22**. The operator training and testing database **110** produces summary reports **111** and individual retail site reports **113**.

Referring to Fig. 13, the customer feedback database **120** of the service center computer **26** will now be described. The customer feedback database **120** receives customer feedback data from a plurality of customer feedback databases **35** of the quality management and reporting application **30** running on the client computer **22**. The customer feedback database **120** produces summary reports **121** and individual retail site reports **123**.

Referring to Fig. 14, the process control results database **130** of the service center computer **26** will now be described. The process control results database **130** receives process control results data from a plurality of process control databases **33** of the quality management and reporting application **30**

running on the client computer **22**. The process control results database **130** produces summary reports **131** and individual retail site reports **133**.

The invention has been described in detail with particular reference to certain preferred embodiments thereof, but it will be understood that variations and modifications can be effected within the spirit and scope of the invention.

PARTS LIST

10 photofinishing system
12 retail photofinishing site
14 service center
16 communication network
18 photofinishing equipment
20 process monitoring device
22 computer
24 modem
26 service center computer
27 remote support technician
28 modem
30 quality management and reporting application
31 employee database
32 training summary reports
33 process control database
34 process control summary reports
35 customer feedback and contact management database
36 customer feedback summary reports
37 customer contact log reports
38 quality results database
39 quality results summary reports
40 operator training and testing application
42 color vision test module
43 employee identification
44 color vision test
45 inform employee of color vision deficiency step
46 inform employee of passing color vision test step
50 operator training and testing module
52 pre-test
54 display list of training module step
56 list of training modules

58 proceed through training step
59 final test
60 quality evaluation application
61 enter employee identification
63 entry of order ID step
64 request input on photographic quality step
65 collect input on imperfection type step
66 request input on physical quality step
67 collect input on type of physical defect
68 request input on clerical quality step
69 collect input on type of clerical imperfection step
70 customer feedback collection application
71 employee identification
73 entry of order ID step
74 request category of complaint step
75 request input on resolution of complaint step
76 request input on level of manager follow-up step
77 request customer contact information step
80 process control application
81 film process control strip
82 paper process control strip
83 feed data into process control database step
84 compare data with control limits step
85 return go indicator step
86 return no go indicator step
100 quality evaluation database
101 produce summary report step
103 produce individual retail site report step
110 operator training and testing database
111 produce summary report step
113 produce individual retail site reports step
120 customer feedback database

121 produce summary report step

123 produce individual retail site report step

130 process control database

131 produce summary report step

133 produce individual retail site report step

WHAT IS CLAIMED IS:

1. A quality assurance system for retail photofinishing, comprising:

a) a communication network;

b) a retail photofinishing site including photofinishing equipment, a client computer connected to the communication network, and a process monitoring device connected to the computer;

c) a computer located at a service center and connected to the communication network;

d) client software running on the client computer, including:

i) a quality management and reporting application for providing quality information to a manager of the photofinishing site,

ii) an operator training and testing application for training and certifying an operator of the retail site and providing testing, training, and certification related data to the service center computer and the quality management application,

iii) a quality evaluation application for monitoring the quality of the product and services provided by the photofinishing site and providing quality related data to the service center computer and the quality management application,

iv) a process control application for monitoring the condition of the photofinishing equipment at the site and providing process control data to the service center computer and to the quality management application, and

v) a customer feedback application for collecting customer feedback, managing follow-up by the retail site manager, and providing customer feedback data to the service center computer and the quality management application; and

e) service center software running on the service center computer, including:

i) an application for collecting, storing, and analyzing data from a plurality of photofinishing sites and producing a report on the quality of products and services provided by the sites.

2. The system claimed in claim 1, wherein the client software further includes a remote service application for facilitating interaction with a remote support technician located at the service center and the server software further includes a remote service application for facilitating interaction between the remote support technician and photofinishing sites.

3. The system claimed in claim 2, wherein the process monitoring device is a densitometer or a flatbed scanner.

4. The system claimed in claim 1, wherein the operator testing and training application includes a color vision test and an operator training and testing module.

5. The system claimed in claim 4, wherein the operator training and testing module contains test on the topics of Understanding Color, Print Grading, Chemical Management, Minilab Maintenance, Customer Delight, Assertiveness, and Retail Selling.

6. The system claimed in claim 1, wherein the quality management and reporting application includes an employee database, a process control database, a customer feedback and contact management database, and a quality data base.

7. The system claimed in claim 6, wherein the employee database contains employee identification information and operator training and testing information, and provides training summary reports.

8. The system claimed in claim 6, wherein the process control database contains process control information from the process control application and provides process control summary reports.

9. The system claimed in claim 6, wherein the customer feedback and contact management database contains customer feedback and contact information from the customer feedback application and provides customer feedback and summary reports.

10. The system claimed in claim 6, wherein the quality database contains quality evaluation information form the quality evaluation application and provides quality results reports.

11. The system claimed in claim 1, wherein the quality evaluation application evaluates photographic quality, physical quality, and clerical quality.

12. The system claimed in claim 11, wherein the customer feedback application collects customer feedback in the categories of photographic, physical, and clerical quality.

13. The system claimed in claim 6, wherein the process control application receives process control data from the process control monitoring device and writes this data to the process control database, compares the data with internally stored control limits, and generates a signal to an operator if the process control data is not within the control limits.

ABSTRACT OF THE DISCLOSURE

A quality assurance system for retail photofinishing includes a communication network; a retail photofinishing site including photofinishing equipment, a client computer connected to the communication network, and a process monitoring device connected to the computer; and a server located at a service center and connected to the communication network. Client software running on the client computer includes a quality management application for providing quality information to a manager of the photofinishing site; an operator testing and training application for training and certifying an operator of the retail site and providing testing, training and certification related data to the server and the quality management application; a quality evaluation application for monitoring the quality of the product and services provided by the photofinishing site and providing quality related data to the server and the quality management application; a process control application for monitoring the condition of the photofinishing equipment at the site and providing process control data to the server and to the quality management application. Server software running on the server includes an application for collecting, storing, and analyzing data from a plurality of photofinishing sites and producing a report on the quality of products and services provided by the sites.

Fig. 1

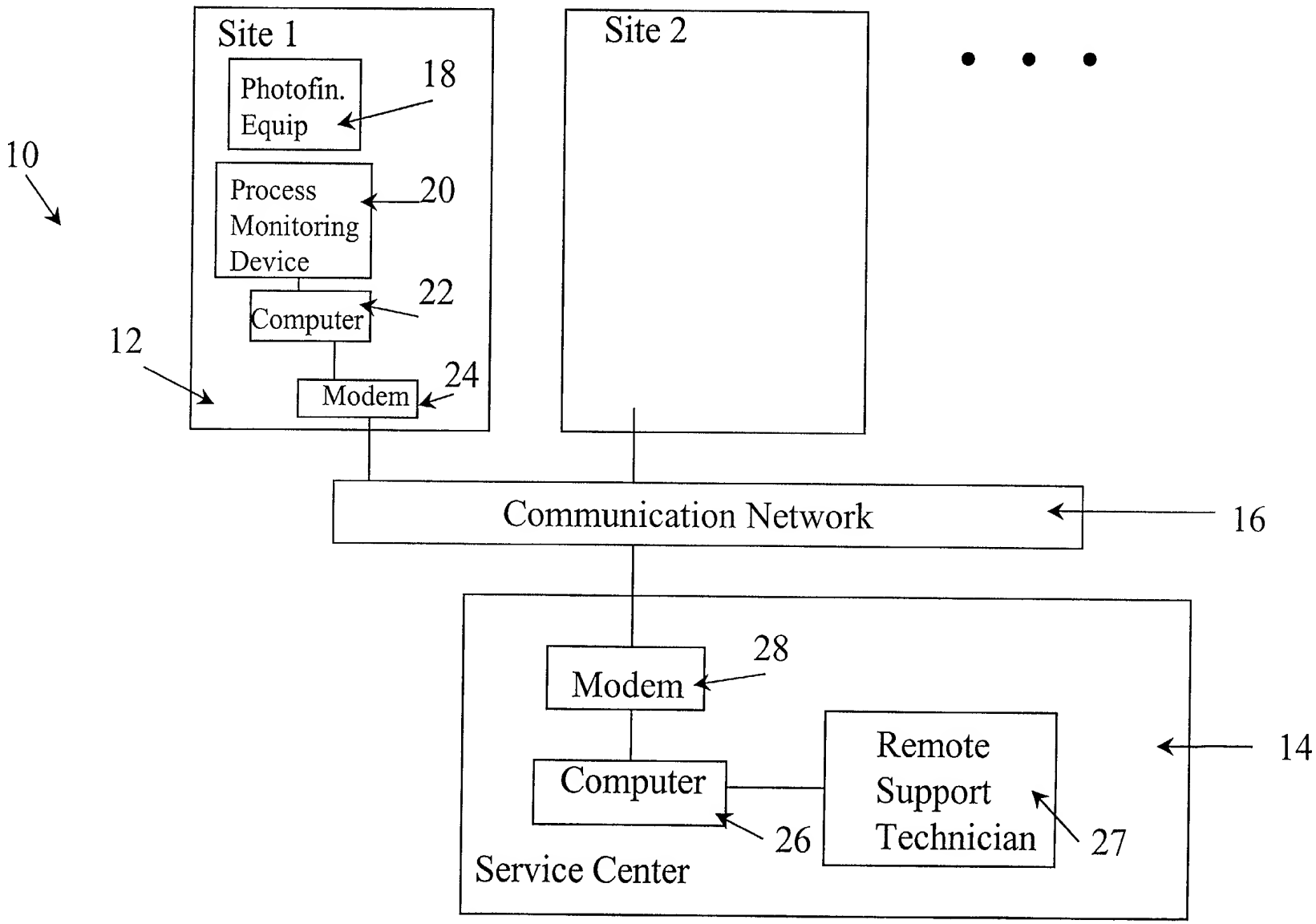

Retail Photofinishing Sites
Site 1
Photofin. Equip
18
10
Process Monitoring Device
20
Computer
22
12
Modem
24
Site 2
Communication Network
16
Modem
28
Computer
26
Remote Support Technician
27
14
Service Center

Fig. 2

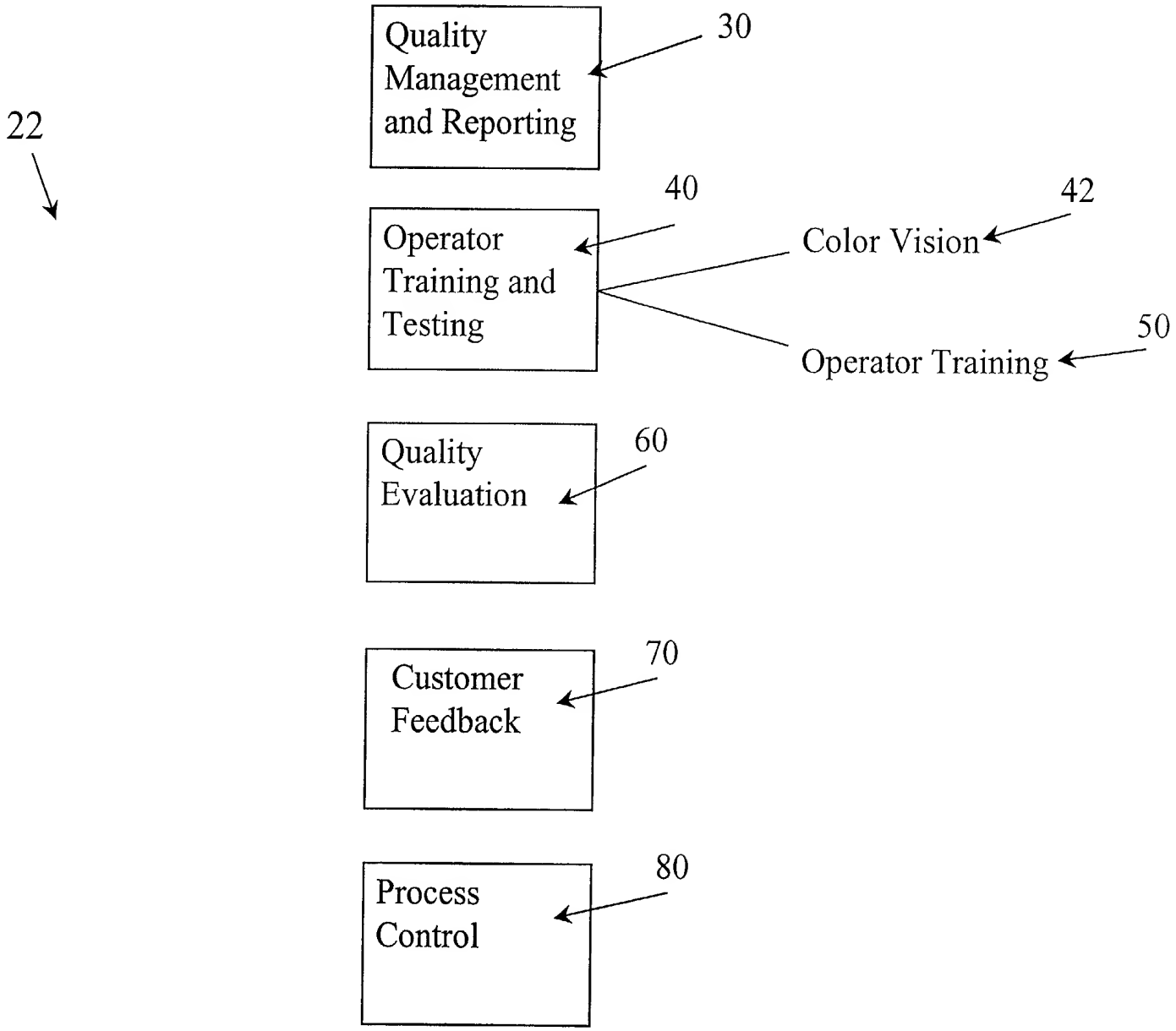

22
Quality Management and Reporting
30
Operator Training and Testing
40
Color Vision
42
Operator Training
50
Quality Evaluation
60
Customer Feedback
70
Process Control
80

Fig. 3

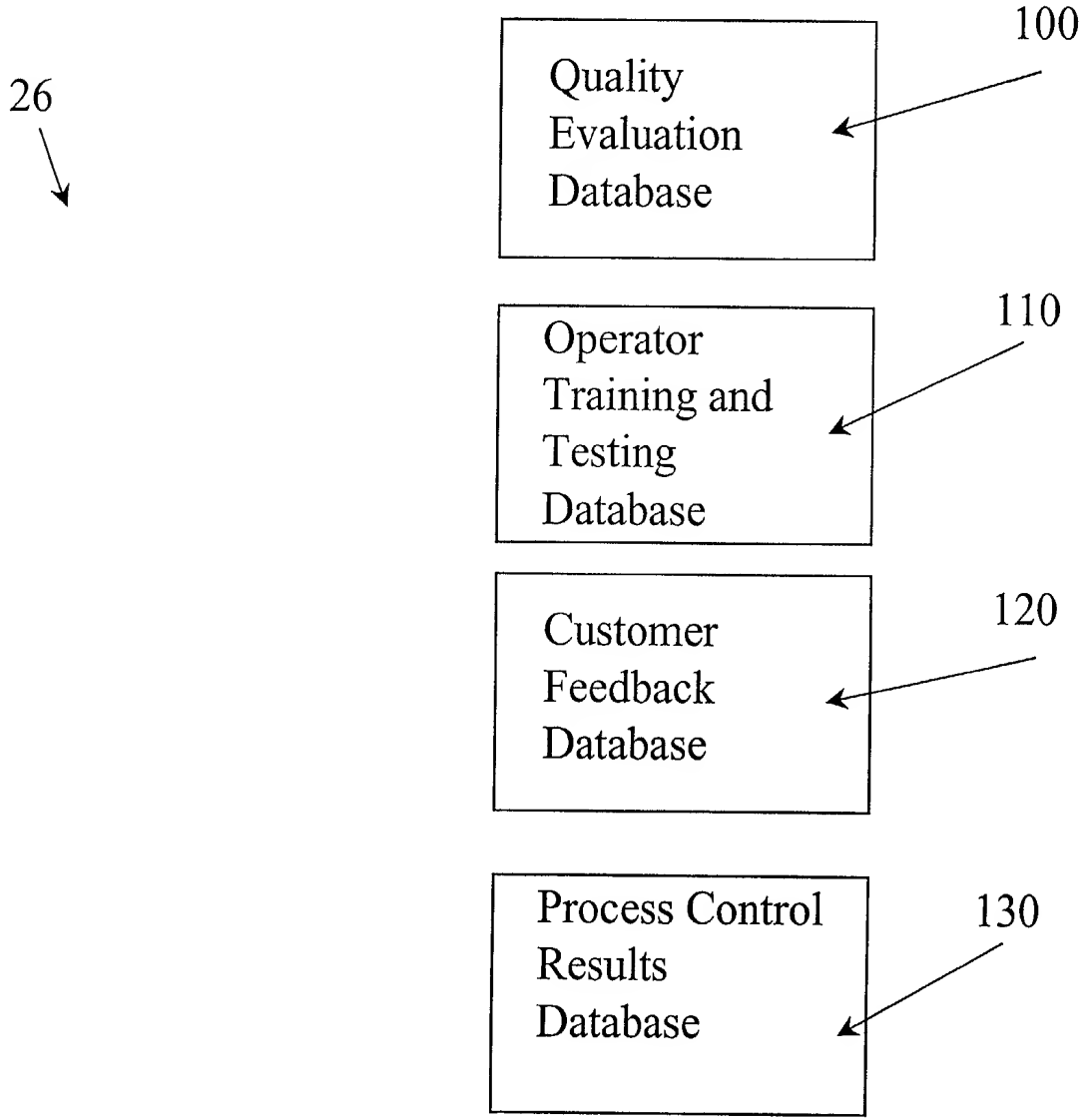

26
Quality Evaluation Database
100
Operator Training and Testing Database
110
Customer Feedback Database
120
Process Control Results Database
130

Fig. 4

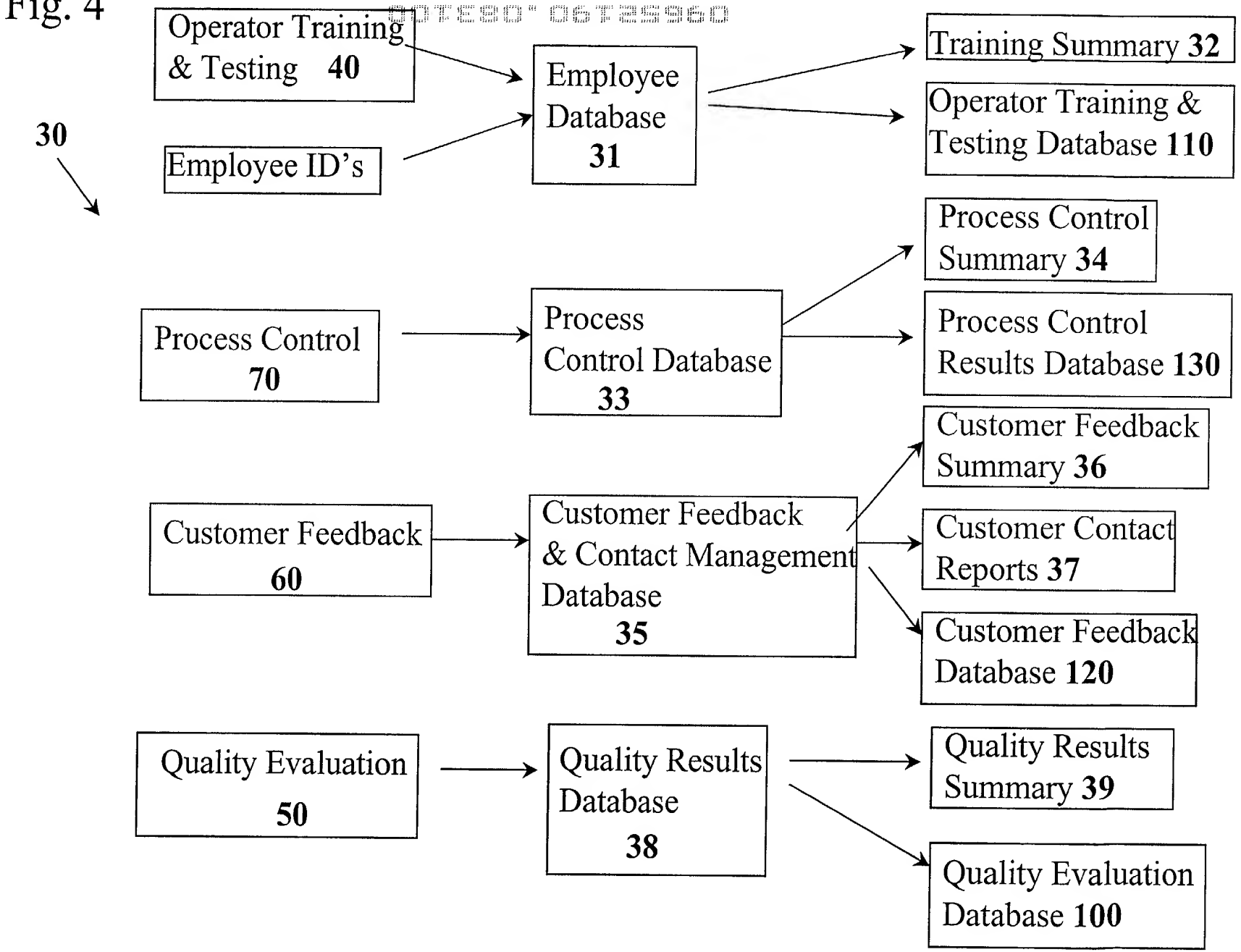

30
Operator Training & Testing 40
Employee ID's
Employee Database 31
Training Summary 32
Operator Training & Testing Database 110
Process Control 70
Process Control Database 33
Process Control Summary 34
Process Control Results Database 130
Customer Feedback 60
Customer Feedback & Contact Management Database 35
Customer Feedback Summary 36
Customer Contact Reports 37
Customer Feedback Database 120
Quality Evaluation 50
Quality Results Database 38
Quality Results Summary 39
Quality Evaluation Database 100

Fig. 5

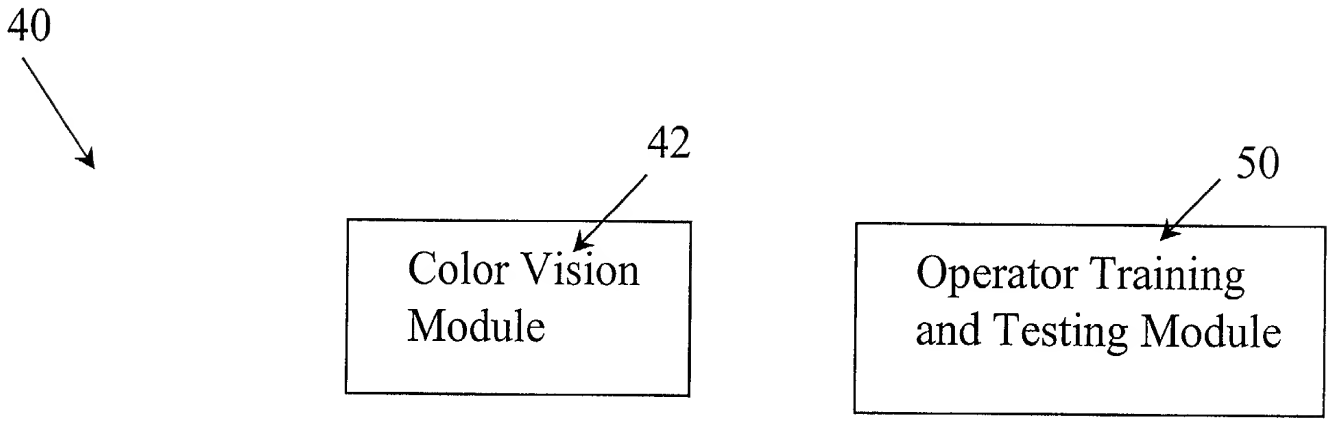

40
42
50
Color Vision Module
Operator Training and Testing Module

Fig. 6

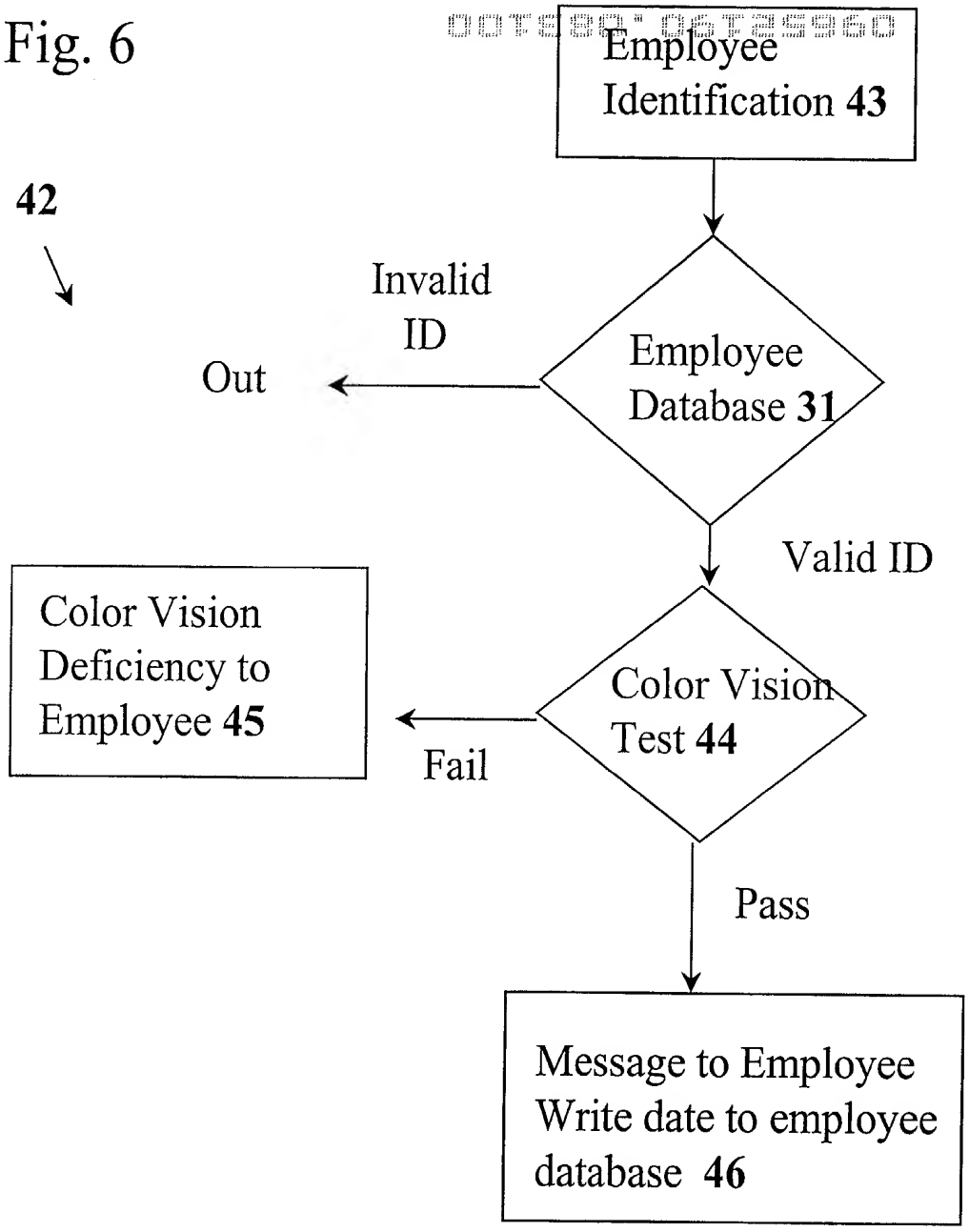

42
Employee Identification 43
Invalid ID
Out
Employee Database 31
Valid ID
Color Vision Deficiency to Employee 45
Fail
Color Vision Test 44
Pass
Message to Employee
Write date to employee database 46

Fig. 7

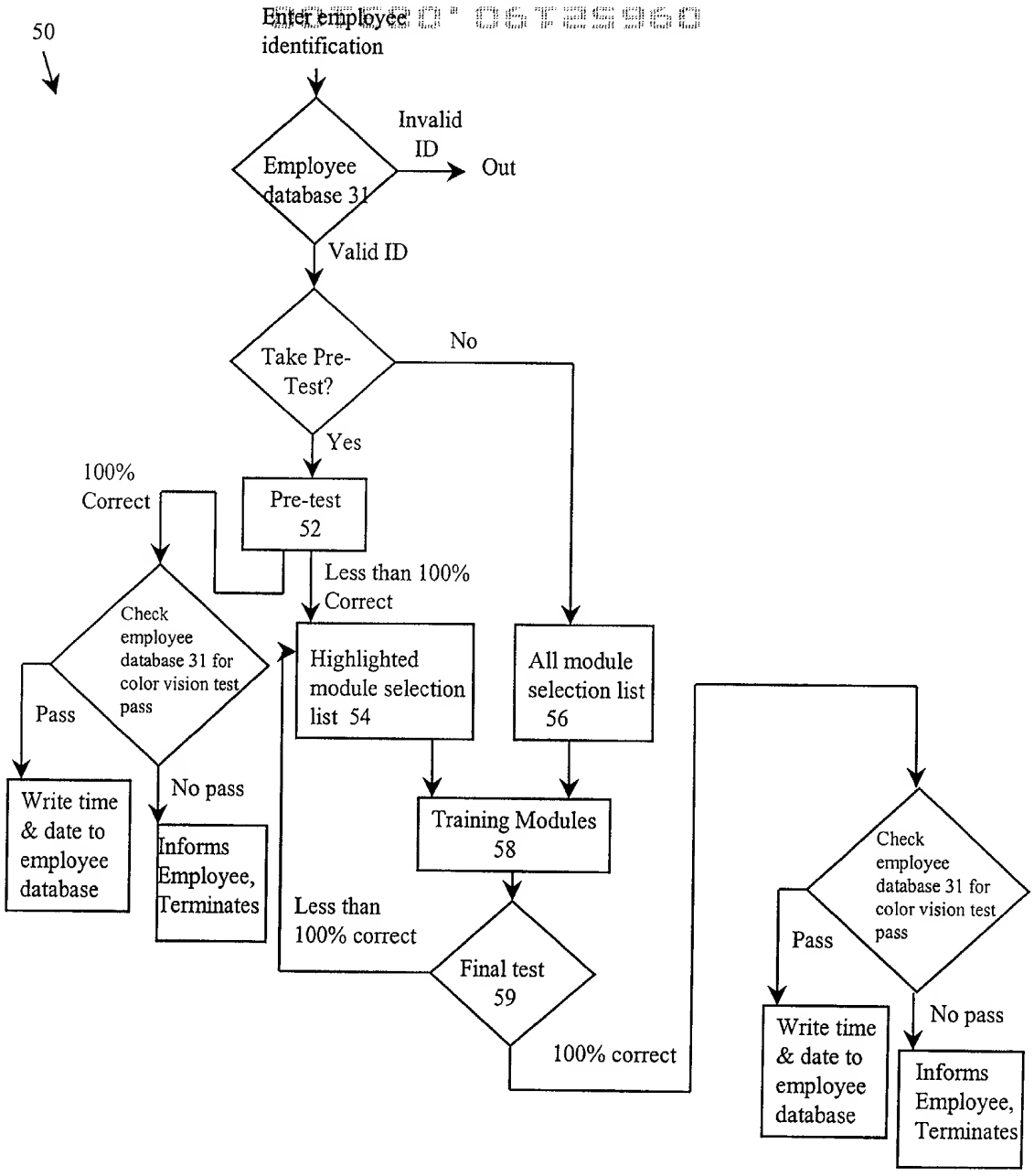

50
Enter employee identification
Employee database 31
Invalid ID
Out
Valid ID
Take Pre-Test?
No
Yes
100% Correct
Pre-test 52
Less than 100% Correct
Check employee database 31 for color vision test pass
Pass
No pass
Write time & date to employee database
Informs Employee, Terminates
Highlighted module selection list 54
All module selection list 56
Training Modules 58
Less than 100% correct
Final test 59
100% correct
Check employee database 31 for color vision test pass
Pass
No pass
Write time & date to employee database
Informs Employee, Terminates

Fig. 8

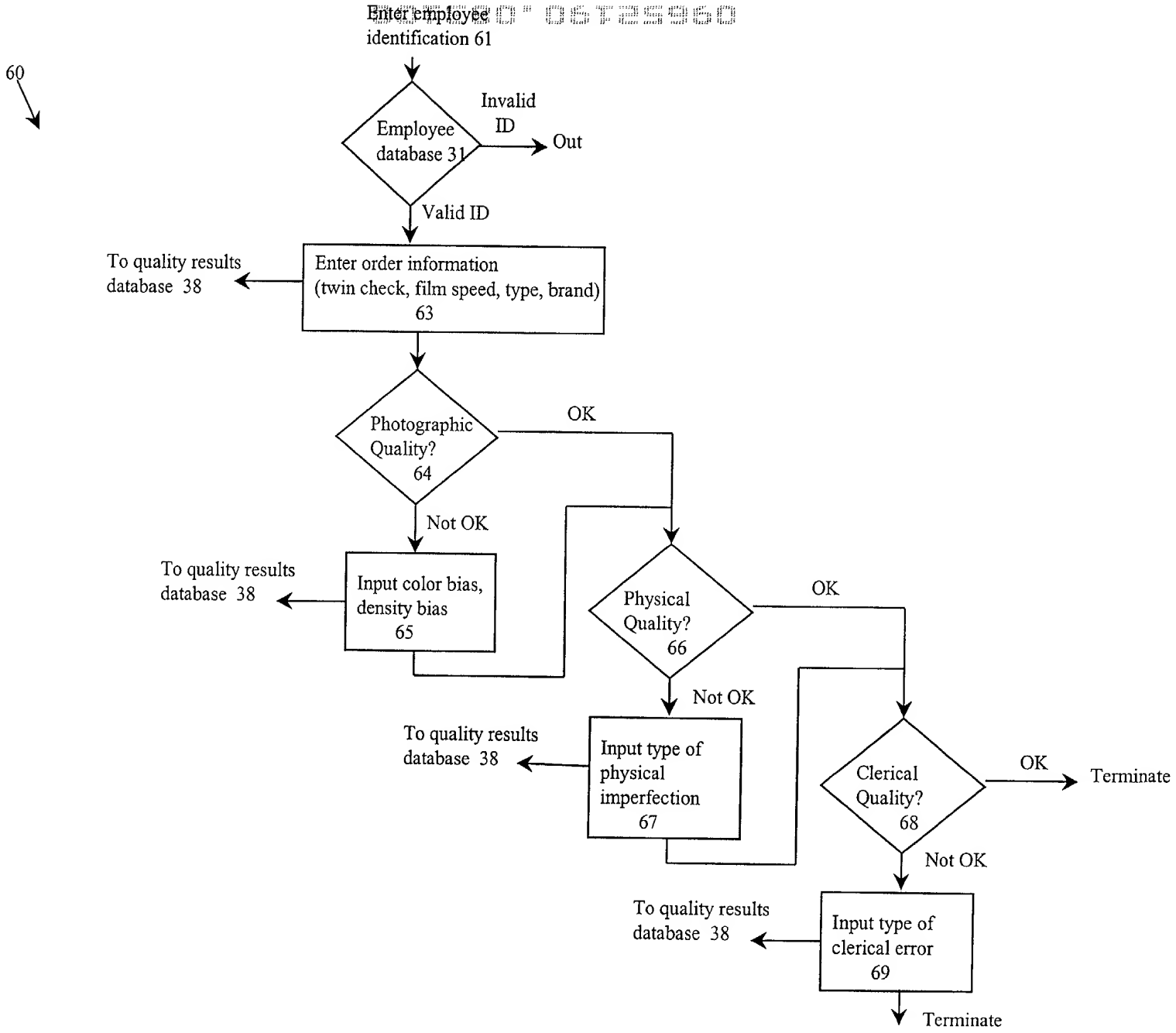

60
Enter employee identification 61
Employee database 31
Invalid ID
Out
Valid ID
To quality results database 38
Enter order information (twin check, film speed, type, brand) 63
Photographic Quality? 64
OK
Not OK
To quality results database 38
Input color bias, density bias 65
Physical Quality? 66
OK
Not OK
To quality results database 38
Input type of physical imperfection 67
Clerical Quality? 68
OK
Terminate
Not OK
To quality results database 38
Input type of clerical error 69
Terminate

Fig. 9

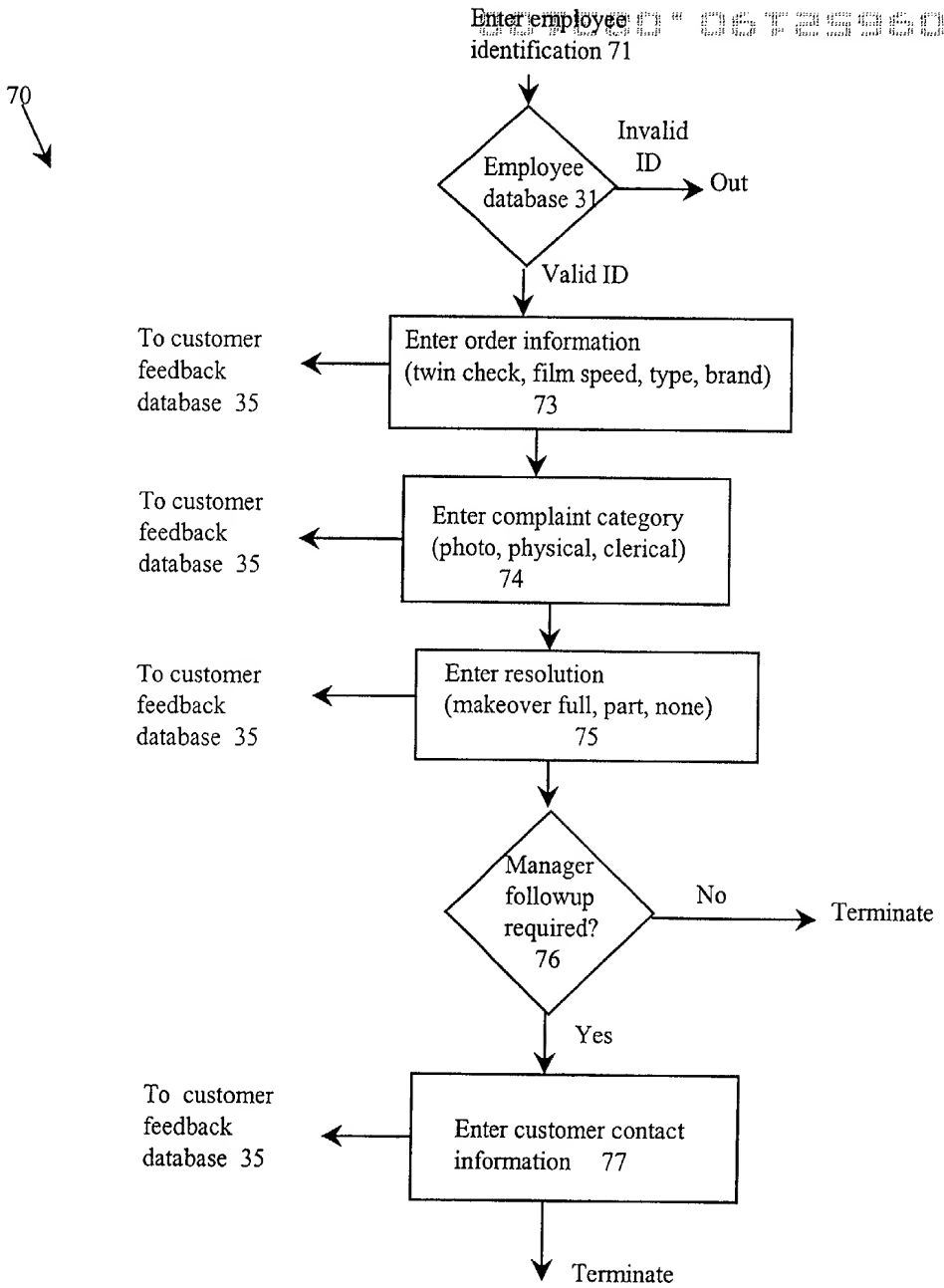

70
Enter employee identification 71
Employee database 31
Invalid ID
Out
Valid ID
To customer feedback database 35
Enter order information (twin check, film speed, type, brand) 73
To customer feedback database 35
Enter complaint category (photo, physical, clerical) 74
To customer feedback database 35
Enter resolution (makeover full, part, none) 75
Manager followup required? 76
No
Terminate
Yes
To customer feedback database 35
Enter customer contact information 77
Terminate

Fig. 10

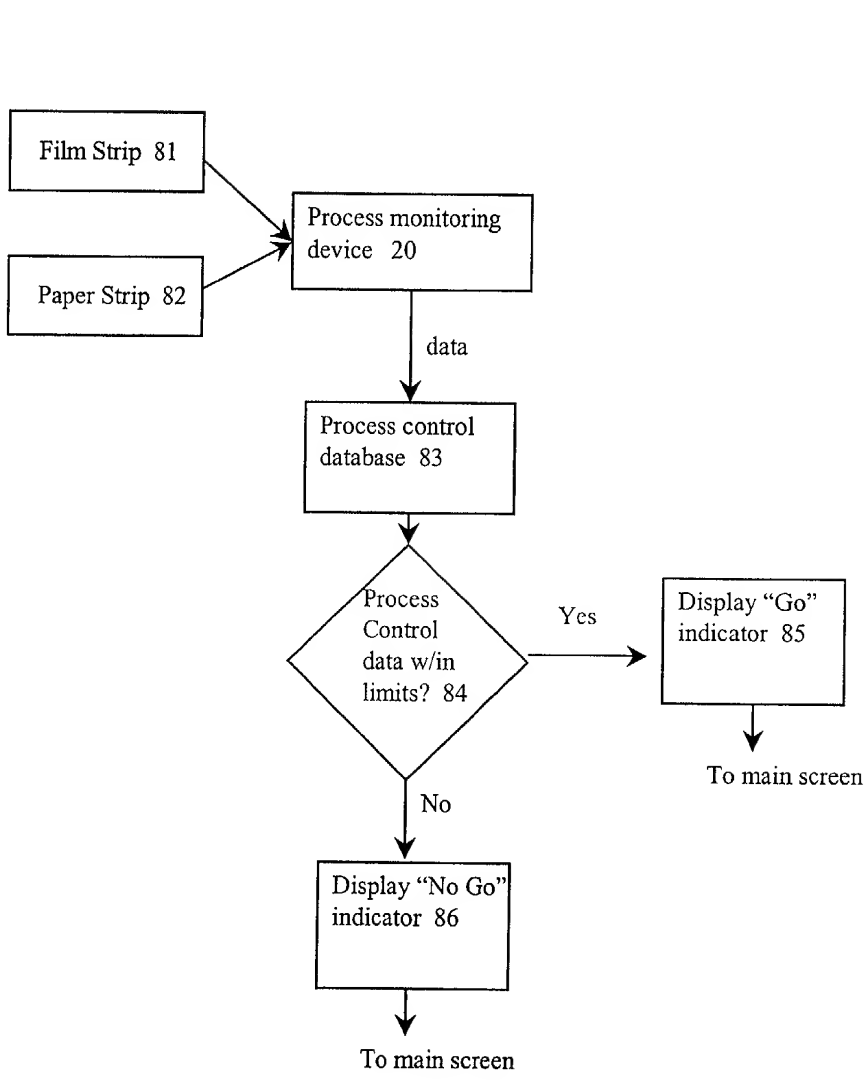

80
Film Strip 81
Paper Strip 82
Process monitoring device 20
data
Process control database 83
Process Control data w/in limits? 84
Yes
Display "Go" indicator 85
To main screen
No
Display "No Go" indicator 86
To main screen

Fig. 11

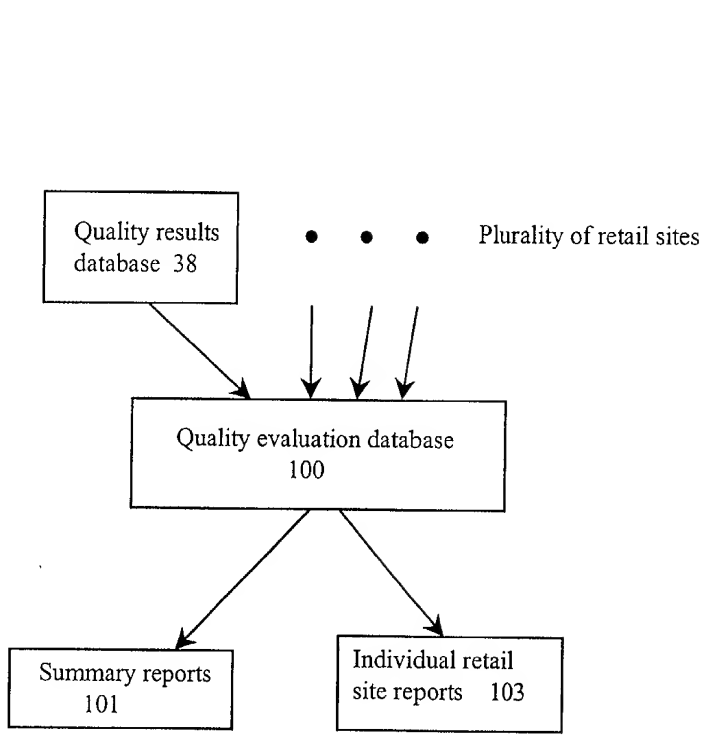

26
Quality results database 38
Plurality of retail sites
Quality evaluation database 100
Summary reports 101
Individual retail site reports 103

Fig. 12

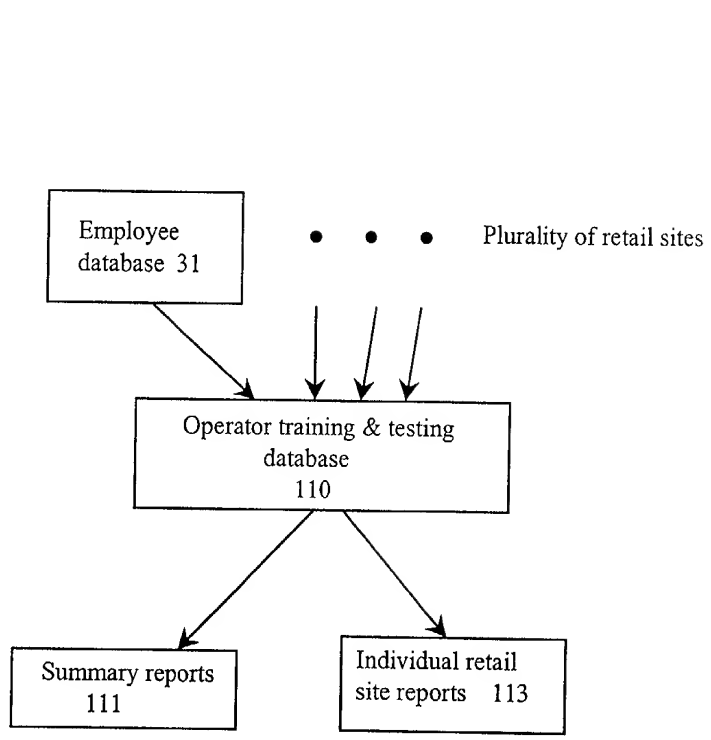

26
Employee database 31
Plurality of retail sites
Operator training & testing database 110
Summary reports 111
Individual retail site reports 113

Fig. 13

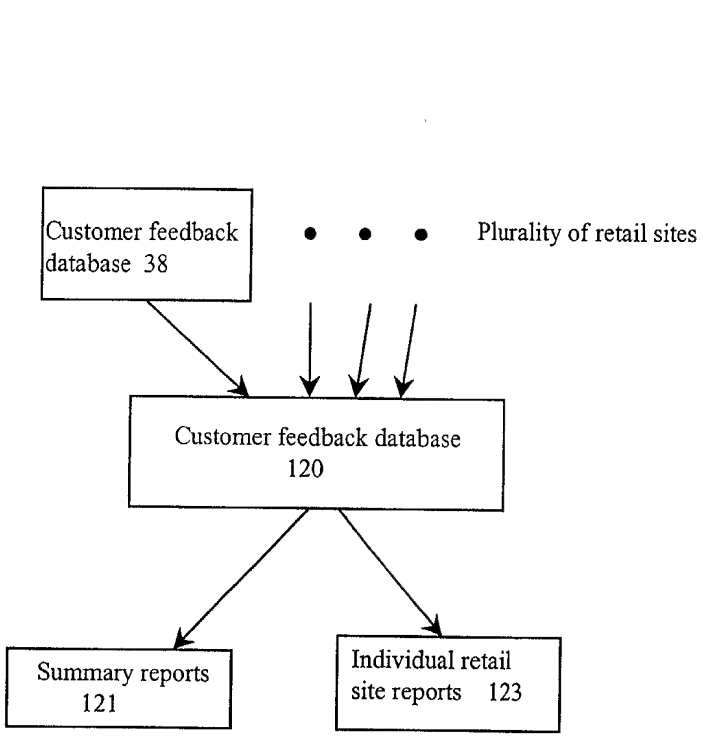
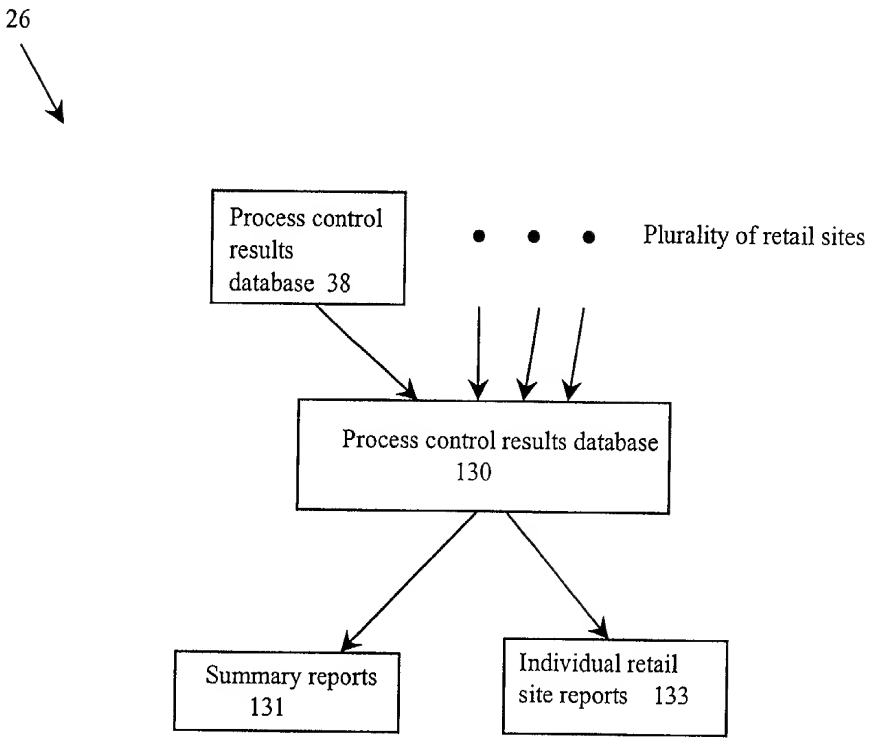

26
Customer feedback database 38
Plurality of retail sites
Customer feedback database 120
Summary reports 121
Individual retail site reports 123

Fig. 14


26
Process control results database 38
Plurality of retail sites
Process control results database 130
Summary reports 131
Individual retail site reports 133

Combined Declaration For Patent Application and Power of Attorney

ATTORNEY DOCKET 80760THC

As below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

QUALITY ASSURANCE SYSTEM FOR RETAIL PHOTOFINISHING

The specification of which (check only one item below).

[X] is attached hereto.

[ ] was filed as United States Application Serial No. on and was amended on (if applicable).

[ ] was filed as PCT international application Number on and was amended under PCT Article 19 on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above

I acknowledge the duty to disclose to the U.S Patent & Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign applications(s) for patent or inventor's certificate or any PCT international application(s) designating a least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

COUNTRY (if PCT indicate PCT)	APPLICATION NUMBER	DATE OF FILING (day month year)	PRIORITY CLAIMED UNDER 35 USC §119			
				YES		NO
				YES		NO
				YES		NO

I hereby claim the benefit under Title 35, United States Code, 119 §(e) of any United States provisional application(s) listed below:

PRIOR PROVISIONAL APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. §119 (e):

PROVISIONAL APPLICATION NUMBER	FILING DATE

I hereby claim the benefit under Title 35, United States Code, §120 of any prior United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior applications(s) in the manner provided by the first paragraph of Title 35, §112, I acknowledge the duty to disclose to the U.S. Patent & Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations §1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR US APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S FOR BENEFIT UNDER 35USC§120:

U S. APPLICATIONS		STATUS (Check one)		
U S. APPLICATION NUMBER	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S SERIAL NUMBERS ASSIGNED (if any)		

Combined Declaration For Patent Application and Power of Attorney *(Continued)*	ATTORNEY DOCKET 80760THC

POWER OF ATTORNEY: As a named inventor, I hereby appoint the attorney(s) and/or agent(s) associated with Eastman Kodak Company Customer No. 01333 to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Send Correspondence to:	Direct Telephone Calls to: *(name and telephone number)*
Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201	Thomas H. Close (716) 722-2396 FAX: (716) 477-4646

2	FULL NAME OF INVENTOR	FAMILY NAME Wozniak	FIRST GIVEN NAME Timothy	SECOND GIVEN NAME M.
0	RESIDENCE & CITIZENSHIP	CITY Rochester	STATE OR FOREIGN COUNTRY New York 14626 USA	COUNTRY OF CITIZENSHIP USA
1	BUSINESS ADDRESS	BUSINESS ADDRESS Eastman Kodak Company	CITY 343 State Street, Rochester	STATE & ZIP CODE (COUNTRY) New York 14650 USA
2	FULL NAME OF INVENTOR	FAMILY NAME Craven	FIRST GIVEN NAME Ronald	SECOND GIVEN NAME J.
0	RESIDENCE & CITIZENSHIP	CITY Highton	STATE OR FOREIGN COUNTRY Victoria, 3216 Australia	COUNTRY OF CITIZENSHIP Australian
2	BUSINESS ADDRESS	BUSINESS ADDRESS Kodak Australasia P/L	CITY 173 Elizabeth Street, Coburg	STATE & ZIP CODE (COUNTRY) Victoria, 3058 Australia
2	FULL NAME OF INVENTOR	FAMILY NAME Ahlrichs	FIRST GIVEN NAME Grant	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY Linslade	STATE OR FOREIGN COUNTRY Bedforshire, England LU7 7UP	COUNTRY OF CITIZENSHIP British
3	BUSINESS ADDRESS	BUSINESS ADDRESS Kodak Processing Companies, Kodak Ltd.	CITY Station Road, Hemel Hempstead	STATE & ZIP CODE (COUNTRY) Herts, England
2	FULL NAME OF INVENTOR	FAMILY NAME Davies	FIRST GIVEN NAME Phil	SECOND GIVEN NAME H.
0	RESIDENCE & CITIZENSHIP	CITY Nr Wargrave	STATE OR FOREIGN COUNTRY Berkshire, England RG10 8NT	COUNTRY OF CITIZENSHIP British
4	BUSINESS ADDRESS	BUSINESS ADDRESS Kodak Processing Companies, Kodak Ltd.	CITY Station Road, Hemel Hempstead	STATE & ZIP CODE (COUNTRY) Herts, England
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
5	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
6	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201	SIGNATURE OF INVENTOR 202	SIGNATURE OF INVENTOR 203
DATE	DATE	DATE
SIGNATURE OF INVENTOR 204	SIGNATURE OF INVENTOR 205	SIGNATURE OF INVENTOR 206
DATE	DATE	DATE